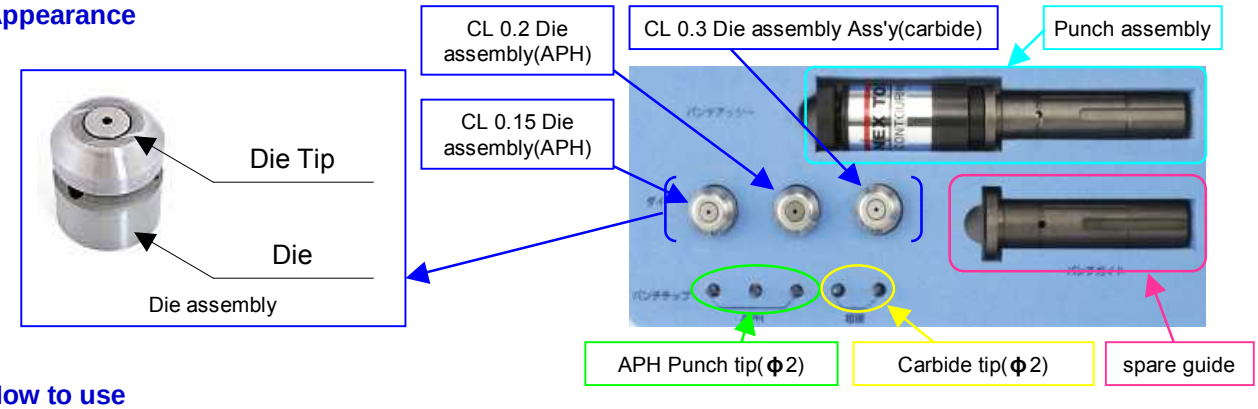
A(1/2") station size Contouring Kit Operation Manual PAT.P

Thank you very much for using our company products.
Please use this tool after understanding the contents of the product in this manual fully.

◆ Specification

Tool Size	A(1/2")-station size φ2.0 (Recommendation diameter)
Max.Thickness	APH Punch Tip : mild steel 1.6mmt , stainless steel 1.0mm (aluminum is not possible). Carbide Punch Tip : mild steel 2.3mm (stainless steel and aluminum are not possible).
Punch/ass'y	AIR-BLOW Type (AIR-BLOW function must be "ON")
Die/ass'y	Vacuum Die Type
Punch Tip Material	APH or Carbide : Neither can be ground.
Die Tip Material	Powdered high speed steel die (is used with APH & Carbide punch tip) :regrinding 0.5mm (MAX) Carbide Die(is used only for carbide punch tip) Carbide Die can not be reground by normal grinder, so please contact Amada when necessary. After grinding , please use shim keeper or die shim.

◆ Appearance



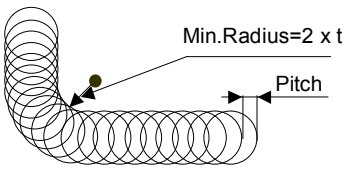
◆ How to use

1. Proper clearance for punch and die is below table.
   Please choose proper die clearance for the material thickness as shown on the table

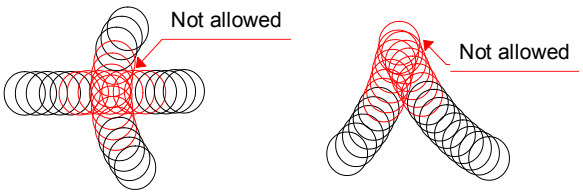
	0.8mm	1.0mm	1.2mm	1.6mm	2.3mm
Mild steel	0.15	0.15	0.15	0.2	0.3
Stainless steel	0.15	0.15	–	–	–

2. Please be careful following points to use contouring tool.

i) Min.Pitch is 0.5mm. Radius size must be more than twice of material thickness for radius processing.
(If Min.radius size is smaller than twice of material thickness, the punch durability will be reduced drastically)



ii) Please don't punch under picture.
Because punch tip durability drops drastically.



iii) Punching Method : First Step --Contouring Tool (Please see yellow part). Second Step--Standard Punching Tool.
If contouring tool is taken as second step,punch tip will break.

3. Please "Switch ON"for power vacuum function with EM ,and Air jet vacuum function with VIPROS III.

4. Punching mode is M696 .(M696 is economy mode)
   (Please change bottom pos. 1.0mm .Default value of M696 bottom pos. is 2.5mm)
   Contouring tool may be broken with M500(Bottom pos.2.5mm)at 2.3mm punching.

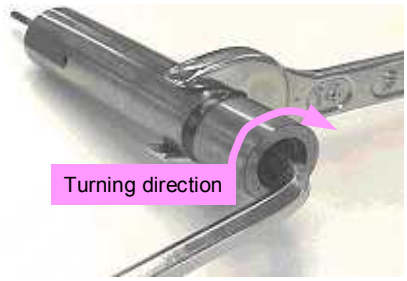
◆ Method of punch tip installation

Punch Ass'y Structure

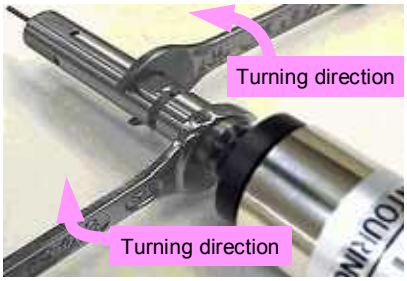
①Insert punch tip in punch holder

②Insert straight pin with hole in punch holder

③Tighten two screws to fix the punch tip by using Allen key (M5) & spanner (14mm).
(Tightening torque is about 10 N • m)

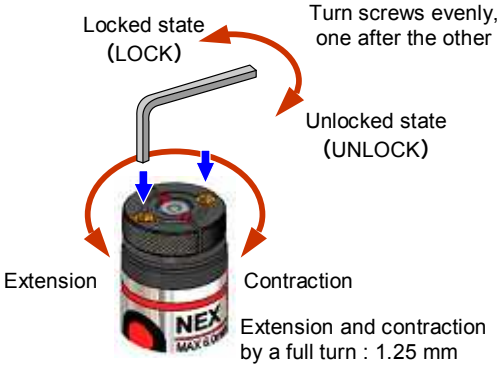


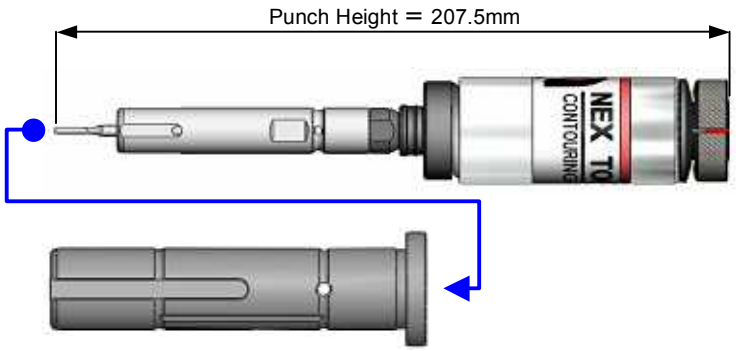
④Tighten punch holder and NEX Spring Ass'y with two pieces spanner(14mm).



⑤Adjust punch height to 207.5mm at unlock state of NEX spring Ass'y. After adjust height, lock NEX spring Ass'y.
※ Please refer to NEX spring Ass'y operation manual about the handling of NEX spring Ass'y.

⑥Attach punch guide after lubrication oil (Recommendation : Amada Mechanic 32)applied on sliding way of punch body





◆ Caution on handling

- ●Replacement of a die tip or guide bush by customer may cause the tooling to be damaged.
  Therefore die Ass'y or guide Ass'y need to be sent back to Amada to replace.
  (Please contact to Amada serviceman)
- ●Timely apply lubrication oil (Amada Mechanic 32) and clean (removal iron powder , dust etc) tooling .

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